

Atty. Docket No. DE920000055US1
(590.080)

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-18. (Cancelled)

19. (Currently Amended) A method of processing a continuous audio stream containing human speech from a plurality of speakers related to at least one particular transaction, comprising the steps of:

identifying a known speaker from among the plurality of speakers;

digitizing the continuous audio stream;

detecting a speaker change in the digitized audio stream;

performing a speaker recognition if a speaker change is detected; and

transcribing at least part of the continuous audio stream if ~~a predetermined~~ the known speaker is recognized.

20. (Previously Presented) A method according to claim 19, comprising a further step of protocolling time information for detected speaker changes.

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21. **(Previously Presented)** A method according to claim 19, wherein the step of detecting a speaker change and/or the step of performing a speaker recognition is/are preceded by a further step of detecting non-speech boundaries between continuous speech segments.

22. **(Previously Presented)** A method according to claim 19, wherein the step of detecting a speaker change is accomplished by use of at least one characteristic audio feature, in particular features derived from the spectrum of the audio signal.

23. **(Previously Presented)** A method according to claim 19, wherein the step of performing a speaker recognition involves the particular steps of calculating a speaker signature from the audio stream and comparing the calculated speaker signature with at least one known speaker signature.

24. **(Previously Presented)** A method according to claim 19 for use in a speech recognition or voice control system comprising at least two speaker-specific speaker models and/or dictionaries, wherein interchanging between the at least two speaker-specific dictionaries is dependent on the detected speaker change and the corresponding recognized speaker.

25. **(Currently Amended)** A method of processing a continuous audio stream containing human speech of a plurality of speakers related to at least one particular transaction, comprising the steps of:

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identifying a known speaker from among the plurality of speakers;

digitizing the continuous audio stream;

detecting a speaker change in the digitized audio stream;

performing a speaker recognition if a speaker change is detected; and

indexing the audio stream with respect to the detected speaker change if a
~~predetermined~~ the known speaker is recognized.

26. **(Previously Presented)** A method according to claim 25, comprising a further step of protocolling time information for detected speaker changes.

27. **(Previously Presented)** A method according to claim 25, wherein the step of detecting a speaker change and/or the step of performing a speaker recognition is/are preceded by a further step of detecting non-speech boundaries between continuous speech segments.

28. **(Previously Presented)** A method according to claim 25, wherein the step of detecting a speaker change is accomplished by use of at least one characteristic audio feature, in particular features derived from the spectrum of the audio signal.

29. **(Previously Presented)** A method according to claim 25, wherein the step of performing a speaker recognition involves the particular steps of calculating a speaker

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signature from the audio stream and comparing the calculated speaker signature with at least one known speaker signature.

30. **(Previously Presented)** A method according to claim 25 for use in a speech recognition or voice control system comprising at least two speaker-specific speaker models and/or dictionaries, wherein interchanging between the at least two speaker-specific dictionaries is dependent on the detected speaker change and the corresponding recognized speaker.

31. **(Currently Amended)** An apparatus for processing a continuous audio stream containing human speech from a plurality of speakers related to at least one particular transaction, comprising:

a predeterminer which predetermines at least one known speaker from among the plurality of speakers;

a detector which detects speaker changes in the audio stream;

a recognizer which recognizes the predetermined speaker in the audio stream; and

an initiator which initiates transcription of at least part of the audio stream in case of a detected speaker change and a recognized predetermined known speaker.

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32. **(Previously Presented)** An apparatus according to claim 31, further comprising a detector which detects non-speech boundaries between continuous speech segments.

33. **(Previously Presented)** An apparatus according to claim 31, further comprising a scanner which automatically scans a continuous audio record, in particular a continuous audio stream recorded on a data or a signal carrier, and for detecting speaker changes in the continuous audio record.

34. **(Previously Presented)** An apparatus according to claim 31, further comprising a monitor which continuously monitors a real-time continuous audio stream and performing the steps of

digitizing the continuous audio stream;

detecting a speaker change in the digitized audio stream;

performing a speaker recognition if a speaker change is detected; and

transcribing at least part of the continuous audio stream if a predetermined speaker is recognized.

35. **(Previously Presented)** An apparatus according to claim 31, further comprising a monitor which continuously monitors a real-time continuous audio stream and performing the steps of

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digitizing the continuous audio stream;

detecting a speaker change in the digitized audio stream;

performing a speaker recognition if a speaker change is detected; and

indexing the audio stream with respect to the detected speaker change if a predetermined speaker is recognized.

36. **(Previously Presented)** An apparatus according to claim 31, further comprising a logging device which protocols time information for the at least one detected speaker change.

37. **(Previously Presented)** An apparatus according to claim 31, comprising a marking device which marks at least the beginning of a detected speech segment related to a predetermined speaker.

38. **(Previously Presented)** An apparatus according to claim 31, comprising data base which stores speech signatures for at least two speakers.

39. **(Currently Amended)** An apparatus for processing a continuous audio stream containing human speech from a plurality of speakers related to at least one particular transaction, comprising:

a predeterminer which predetermines at least one known speaker from among the plurality of speakers;

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a detector which detects speaker changes in the audio stream;

a recognizer which recognizes the predetermined speaker in the audio stream; and

an indexer for indexing the audio stream dependent on a detected speaker change
and a recognized predetermined speaker.

40. **(Previously Presented)** An apparatus according to claim 39, further
comprising a detector which detects non-speech boundaries between continuous speech
segments.

41. **(Previously Presented)** An apparatus according to claim 39, further
comprising a scanner which automatically scans a continuous audio record, in particular a
continuous audio stream recorded on a data or a signal carrier, and for detecting speaker
changes in the continuous audio record.

42. **(Previously Presented)** An apparatus according to claim 39, further
comprising a monitor which continuously monitors a real-time continuous audio stream
and performing the steps of

digitizing the continuous audio stream;

detecting a speaker change in the digitized audio stream;

performing a speaker recognition if a speaker change is detected; and

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transcribing at least part of the continuous audio stream if a predetermined speaker is recognized.

43. **(Previously Presented)** An apparatus according to claim 39, further comprising a monitor which continuously monitors a real-time continuous audio stream and performing the steps of

digitizing the continuous audio stream;

detecting a speaker change in the digitized audio stream;

performing a speaker recognition if a speaker change is detected; and

indexing the audio stream with respect to the detected speaker change if a predetermined speaker is recognized.

44. **(Previously Presented)** An apparatus according to claim 39, further comprising a logging device which protocols time information for the at least one detected speaker change.

45. **(Previously Presented)** An apparatus according to claim 39, comprising a marking device which marks at least the beginning of a detected speech segment related to a predetermined speaker.

46. **(Previously Presented)** An apparatus according to claim 39, comprising data base which stores speech signatures for at least two speakers.

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47. (Currently Amended) A speech recognition or voice control system processing an incoming audio stream containing human speech from a plurality of speakers and having at least two speaker models and/or speaker-specific dictionaries, comprising:

a detector which detects a speaker change in the incoming audio stream;

a gatherer which gathers speaker-specific information and for comparing the gathered speaker-specific information with corresponding speaker-specific information of at least one predetermined known speaker from among the plurality of speakers thus recognizing the at least one predetermined speaker; and

an interchanger which interchanges between the at least two speaker-specific dictionaries dependent on the detected speaker change and the corresponding recognized speaker.

48. (Currently Amended) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for processing a continuous audio stream containing human speech from a plurality of speakers related to at least one particular transaction, said method comprising the steps of:

identifying a known speaker from among the plurality of speakers;

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digitizing the continuous audio stream;

detecting a speaker change in the digitized audio stream;

performing a speaker recognition if a speaker change is detected; and

transcribing at least part of the continuous audio stream if a ~~predetermined~~ the
known speaker is recognized.

49. (Currently Amended) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for processing a continuous audio stream containing human speech from a plurality of speakers related to at least one particular transaction, said method comprising the steps of:

identifying a known speaker from among the plurality of speakers;

digitizing the continuous audio stream;

detecting a speaker change in the digitized audio stream;

performing a speaker recognition if a speaker change is detected; and

indexing the audio stream with respect to the detected speaker change if a ~~predetermined~~ the known speaker is recognized.